



TO: Cheryl King, Staff Director

FROM: Paul Grether, MARTA Staff Resource

DATE: July 8, 2008

SUBJECT: Peer Regions' Ability to Cope with Increased Transit Demand and Rising Fuel Costs

At the June 2008 TPB Board meeting there were questions about how peer regions and transit systems were coping with increased demand and rising fuel costs. The question was focused on how the Atlanta Region was stacking up and what attributes successful regions have in this regard.

An article from the July issue of *Planning* magazine on the subject is appended.

In late May the American Public Transportation Association (APTA) completed a survey of transit agencies across the country with regards to how they are coping with increased fuel costs and ridership increases. The summary of the APTA published survey results are appended.

The Federal Transit Administration has not been providing any additional financial assistance to transit operators as a result of increasing fuel costs and ridership, but FTA is allowing some grant funds to be used for operating rather than restricted to capital. Note that these are not newly obligated funds. The "Dear Colleague" letter from the Administrator on the subject is appended.

National Perspective

Nationally fuel costs for all modes (diesel, natural gas, electricity, etc.) has increased from an average of 6% of an agencies' operating budget to 11%.

In summary transit systems nationally are taking some or all of the following actions:

- Fare increases
- Increase in local/state contributions
- Delay or cancellation of operating or capital improvements
- Delay or cancellation of service increases
- Transfer of funds from capital improvement programs to operations
- Service cuts
- Borrowing of funds for operations
- Implementation or change of fuel procurement strategy

The costs for all types of fuel have increased but diesel costs to agencies have increased the most at an average 166% increase since 2004.

Several major urban systems across the country that are in an expansion mode, such as Seattle, New Jersey, Salt Lake City, Charlotte Denver and others are in the midst of taking delivery of equipment such as additional rail vehicles and buses. This has allowed deferral of vehicle retirements or the redirection of expansion fleets onto existing services to help meet the new and growing demand.

Atlanta Region Perspective

Transit agencies in the Atlanta Region have implemented:

- Cobb Community Transit and Gwinnett County Transit have implemented fare increases
- MARTA has a long-standing practice of fuel price hedging, primarily for budget predictability - the current MARTA fuel price hedge expires at the end of CY2008
- GRTA Xpress procures fuel off of the State of Georgia fuel contract and is redirecting expansion fleet and spare vehicles to increased services

There are several of these actions that many national peer regions have implemented that transit agencies in the Atlanta region cannot implement. Limitations on transit agencies in the Atlanta Region in this regard include:

- Lack of state financial support for transit, particularly operating funds
- Lack of ability to move funds between capital and operating budgets
 - MARTA has a legislatively mandated “50/50” split between capital and operating tax revenues
 - County systems are a part of the county Capital Improvement Program and compete against other budgetary needs, typically in the general fund
 - GRTA Xpress is funded from a combination of county and federal CMAQ funds - recently announced GDOT GO bond funding is limited to the capital procurement of additional buses
- Lack of large scale expansion projects is hampering efforts to meet ridership demand

Appendix

1. *Planning* magazine “Gas Prices Are Up, and So Are Transit Costs”, July 2008
2. *American Public Transportation Association* “Impact of Rising Fuel Costs on Transit Services, Survey Results”, May 2008
3. *Federal Transit Administration* “Dear Colleague”, June 2008

July 2008

Planning News

Gas Prices Are Up, and So Are Transit Costs

As gas prices continue to soar, newspapers everywhere are reporting significant increases in transit ridership. That's the good news. The bad news is that fuel costs are rising for transit agencies, too, and the increase in fare revenues from new riders doesn't even begin to fill the gap.

In Denver, transit ridership went up 11 percent last year and is up eight percent in the first quarter of this year. At the same time, the Denver Regional Transportation District's fuel costs have jumped a whopping 55 percent over last year's. Cal Marsella, general manager and CEO of the agency, said that even the locked-in price of \$3.20 per gallon that RTD negotiated in March is well over the budgeted price of \$2.62.

Complicating matters in Denver and elsewhere is the fact that local sales tax revenues — which Marsella says fund 80 percent of RTD operations — are flat or down. "We're projecting we'll get \$18 million less than what we budgeted," he says. "People just don't have money to spend on taxable items."

Transit agencies face a real dilemma, notes Mantill Williams, director of advocacy communications for the American Public Transportation Association. He says they must raise fares, cut services, or "eat the costs and run on a deficit." But, as advocates for the poor, elderly, and disabled point out — and transit administrators well know — higher prices at the fare box and fewer or shortened routes will hurt low- and moderate-income people the most.

In late May, the Utah Transit Authority took that chance. The UTA board approved a 25-cent fuel surcharge starting this month — taking the cost of a one-way trip to \$2.00 — with another 25-cent increase expected in the fall. Denver raised its fares in January, a year earlier than scheduled.

Across the country, the transit agencies of Charlotte, North Carolina; Oakland, California; Portland, Oregon; and the state of Rhode Island are all considering fare increases. Denver, Miami, and Nashville are among the many places considering service cuts.

At least one transit agency is dropping prices. The Rochester Genesee Regional Transit Authority announced in late April that its fares would go from \$1.25 to \$1.00. CEO Mark Aesch says the agency can lower its price because of a successful four-year effort to increase efficiencies and rein in a \$27.5 million deficit.

The silver lining may be that investments in hybrid and fuel-efficient vehicles will pay off sooner. J. Barry Barker, executive director of the Transit Authority of River City in Louisville, Kentucky, thinks that might be the case in his area. He told *Passenger Transport*, the American Public Transportation Association's weekly publication, that his "rough calculations showed that diesel would have to be above \$4 a gallon to make up the price differential." That level, he adds, isn't far away.

APTA is conducting a survey of transit agencies, asking how increased fuel prices have affected them. The results will be available later in the summer at www.apta.com.

Meghan Stromberg

Stromberg is Planning's senior editor.



Impact of Rising Fuel Costs on Transit Services

Survey Results

May 2008

**APTA
1666 K St. NW
Washington, DC 20006
202-496-4800**

**Impact of Rising Fuel Costs on Transit Services
Survey Results
May 27, 2008**

Introduction

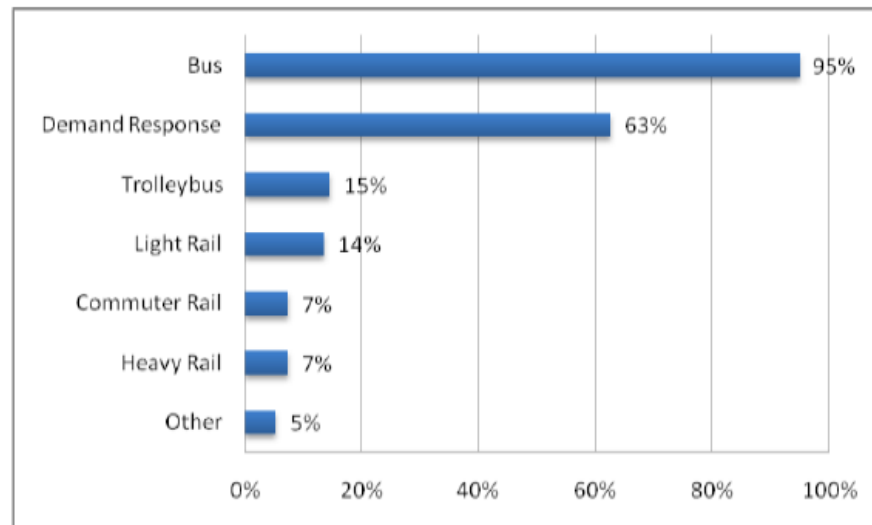
Fuel and electricity are important components of public transportation operations. On an annual basis, public transportation providers consume more than 760 million gallons of diesel and gasoline and more than 5.8 billion kilowatt hours of electricity. For every penny added to the cost of diesel and gasoline, public transportation providers face an increased cost of more than \$7.6 million dollars. Anecdotally, APTA members are increasingly reporting rapidly increasing fuel costs and resulting budget difficulties. In response to the recent surge in fuel prices, APTA is seeking to better understand the effect of these changes on member transit agencies. Members have reported surges in ridership, and at the same time, increased difficulty in maintaining existing services due to higher fuel prices. This survey seeks to understand the general levels of increases in costs experienced by agencies, typical actions taken in response to these changes, and strategies agencies are undertaking to purchase fuel.

On April 21, 2008, an online survey was sent to all APTA U.S. transit agency members' designated recipients. The survey was open to member responses through May 2, 2008. A total of 96 members responded to the survey resulting in an approximate 25 percent response rate among all APTA U.S. transit agency members.

Profile of Survey Respondents

Respondents included agencies responsible for a range of modal operations as shown in the chart below, with 95 percent operating bus (91), 14 percent light rail (13), and 7 percent for both commuter rail and heavy rail (7 each).

Figure 1 - Transit Modes Operated by Respondents



Respondents vary in size as indicated by the number of vehicles reported in operation. A total of 42 agencies operate more than 100 vehicles and 54 operate fewer than 100. A number of large agencies participated, including 8 with more than 1,000 vehicles in operation.

Table 1 – Transit Agency Respondents - Number of Vehicles in Operation

Number of Vehicles	Number of Respondents	% of Total
More than 1,000	8	8%
250 to 1,000	16	17%
100 to 250	18	19%
50 to 100	26	27%
Less than 50	28	29%

Fuel and Electricity Costs

Agencies provided detail on the cost of diesel fuel and electricity, the two primary fuel types for transit operations. Typically, for fuel purchases, agencies use a mix of purchasing strategies, including short and long-term contracts. In some cases, the results indicated below may understate the long-term effects of fuel increases that will occur as existing long-term contracts expire.

The survey results indicate a distinct difference in cost escalation between diesel fuel and electricity. While diesel prices have almost tripled in just four years, electricity prices have increased less than 20 percent. The implication is that agencies relying more heavily on diesel to power public transportation vehicles are likely facing the most immediate and substantial effects on operating budgets. Diesel is used by virtually all bus operators and some commuter rail agencies, while electricity is used by heavy rail, light rail, trolleybus and some commuter rail operators.

Price Paid for Diesel Fuel

Transit agencies have experienced a rapid increase in the price for diesel fuel. Changes in diesel fuel prices have occurred in surges with increases of 44 percent between 2004 and 2005, and again between 2007 and 2008. Overall, since 2004, the price has increased from \$1.25 to \$3.32 a gallon, an increase of 166 percent in just four years. Agencies often do not include taxes in these figures, and in some cases hold long-term contracts which can mitigate changes over the short term. As a result, in times of rising costs, prices are generally less than those often found on the retail market.

Table 2 - Diesel Fuel Costs

Year	Number of Respondents	Average price paid per gallon of diesel fuel	Percent Change from Previous Year
2004	48	\$1.25	
2005	52	\$1.80	43.5%
2006	52	\$2.15	19.7%
2007	54	\$2.31	7.1%
2008	56	\$3.32	43.8%

Price as of April 1 of each year

Price paid per kw/h for electricity (for vehicle operations)

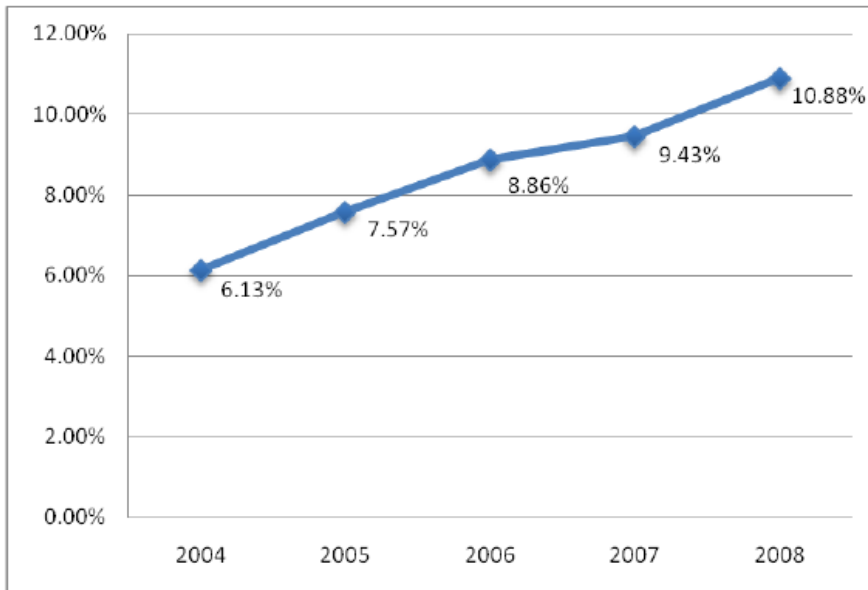
The price of electricity, while more stable than the price of diesel, has increased significantly over the past four years. In total, the price of electricity increased 18.9 percent during the four year period covered by the survey. Again, the long-term nature of some electricity contracts, as well as the nature of the electricity market itself, may understate the potential impacts of price increases likely to occur in coming years. In 2007, the national average for electricity cost exceeded that of the numbers reported in this survey (\$0.104 compared to \$0.092) by more than 10 percent, a sign that agency electricity prices are likely to continue to climb over the next few years.

Table 3 – Electricity Costs

	Number of Respondents	Price per kw/h	Percentage Change from Previous Year
2004	13	\$0.0783	
2005	13	\$0.0858	9.6%
2006	13	\$0.0913	6.4%
2007	13	\$0.0920	0.8%
2008	12	\$0.0931	1.2%

Effect on agency operating budgets

As a result of rapid increases in fuel and electricity prices, an increasing share of agency budgets are dedicated to fuel costs. Although fuel historically represents a relatively small proportion of agency operating costs, the recent increase in fuel prices is changing the significance of fuel in agency operating budgets. In just a four year period, the share of operating costs dedicated to fuel has increased from just over 6 percent to almost 11 percent.

Figure 2 – Share of Operating Budget Dedicated to Fuel and Power

How are agencies responding?

Agencies are responding to increased fuel and electricity costs with a number of actions that are likely to either increase costs for customers or reduce the amount of service. Though some variation exists between bus and rail operations, it appears that a large number of agencies are increasing fares and delaying operating improvements.

Bus Operations

Among bus operators, the most common actions include fare increases (48%), increased state and local contributions to operations (43%), delays in operating and capital improvements (42% for each), delays or cancellation of service increases (38%), and funding transfers from capital to operating (38%). Despite increases in ridership, rising costs are contributing to service cuts and delays in service improvements. Continued increases in fuel prices could result in further reductions in service, deferred service improvements, and delays in needed capital investments not yet reflected in these results.

Table 4 – Actions by Bus Operators in Response to Higher Fuel Prices

	Yes	No	Number of Respondents
Fare increases	48%	52%	62
Increase in local/state contributions	43%	57%	58
Delay or cancellation of other operating improvements	42%	58%	59
Delay or cancellation of capital improvements	42%	58%	60
Delay or cancellation of planned service increases	38%	62%	60
Transferred funds from capital use to operations	38%	62%	58
Service cuts	19%	81%	58
Borrowed funds for operations	14%	86%	56

Rail Operations

Rail operators represent a smaller share of respondents, but indicate a similar mix of responses. Again, fare increases, delayed service improvements and in some cases, service cuts have occurred. In addition, a much higher proportion of rail operators have increased fares, representing more than two-thirds of respondents. Other common actions include delays or cancellation of capital improvements (54%), increases in state and local contributions (46%), delays or cancellation of operating improvements (43%), and transferring funds from capital to operations (36%).

Table 5 – Actions by Rail Operators in Response to Higher Fuel/Electricity Prices

	Yes	No	Number of Respondents
Fare increases	69%	31%	16
Delay or cancellation of capital improvements	54%	46%	13
Increase in local/state contributions	46%	54%	13
Delay or cancellation of other operating improvements	43%	57%	14
Transferred funds from capital use to operations	36%	64%	14
Delay or cancellation of planned service increases	29%	71%	14
Service cuts	21%	79%	14
Borrowed funds for operations	21%	79%	14

Changes in Ridership and Effect on Fare Revenue

Nearly all respondents report an increase of transit ridership over the past three years. Most attribute this increase, at least in part, to the increase in fuel costs to automobile riders.

Figure 3 – Has your transit ridership increased over the past three years?



Figure 4 – Do you believe increased fuel costs for auto drivers have contributed to increases in ridership?



Agencies were also asked to indicate whether fare revenue is offsetting increasing fuel costs, and the proportion of increased costs that are being recovered from increased revenue. Although almost all agencies reported less than a full recovery of costs from higher fare revenue, inconsistencies in responses to this question made it difficult to reach any clear conclusion. As an example based on national averages, a penny increase in diesel and gasoline costs would add more than \$5.4 million to the cost of bus operations nationwide. Based on the current national average fare revenue of \$0.89 per unlinked bus trip, agencies would need to add more 6 million trips on an annual basis to recover just a penny increase. An increase in fuel cost of \$1 per gallon would require that agencies carry more than 600 million additional passenger trips per year, on bus services alone; an increase of more than 10 percent over current bus ridership levels. Such an increase would no doubt require additional services, and additional operating costs. It is easy to see why agencies are struggling to meet surging fuel costs.

Changes in Fuel Purchase Strategies

Approximately one-third of agencies report that changes in fuel prices have affected the way the agency purchases fuel.

Figure 5 – Have fuel price increases changed the way you purchase fuel?



Of those reporting a change in the way the agency purchases fuel, transit agencies have adjusted their procurement practices in various ways. About half have switched to longer term contracts, while the other half have switched to the spot market. About half have reduced the time period for contracts; while one-third have increased the time period of contracts. More than 7 in 10 report more difficulty in obtaining long-term contracts, while half report that cost escalators are becoming more common in fuel contracts. This will make transit systems even more vulnerable to future increases in fuel costs and will make budgetary outlooks more unpredictable.

Table 6 – Changes in Fuel Purchase Strategies

	Yes	No	Total Responded
More difficulty in obtaining long-term contracts	71%	29%	21
Changed from long-term contracts to spot market	52%	48%	23
Reduced time period of fuel contracts	50%	50%	20
Escalators more common in contracts	50%	50%	18
Switched to long-term contracts	42%	58%	24
Increased time period of fuel contracts	32%	68%	22

Respondents also reported a wide range of other actions that they are taking in response to fuel price changes. Examples include:

- No longer using bio-diesel as it is more expensive than diesel
- Hedging fuel prices through various strategies
- Purchasing through state contracts or other consortiums

Summary

This survey confirms that APTA member agencies are experiencing a rapid increase in fuel and electricity prices affecting agency budgets, fare policies, operations, and fuel purchasing strategies. The survey results indicate a distinct difference in cost escalation between diesel fuel and electricity. While diesel prices have almost tripled in just four years, electricity prices have increased less than 20 percent. Agencies relying more heavily on diesel to power public transportation vehicles, most often bus operators, are likely facing the most immediate and substantial effects on operating budgets. Agencies are responding with increased fares, delayed service improvements, deferred capital investments, additional funding from state and local sources and in some cases, service cuts. At the same time, nearly all agencies are experiencing increases in ridership. Increased fare revenue is unable to generate sufficient revenue to offset increases in fuel costs and transit agencies have had to take budgetary actions over time, including fare increases and service adjustments. Agencies are attempting to reduce fuel costs through various changes in purchasing strategy, though no clear consistency in approach is occurring. Many are also facing increased difficulty in obtaining long-term contracts, leaving agencies more vulnerable to future fuel increases. Overall, the rapid increase in fuel prices is clearly having a notable impact on agency operations.



U.S. Department
of Transportation

**Federal Transit
Administration**

The Administrator

1200 New Jersey Avenue, SE
Washington, D.C. 20590

JUN 27 2008

Dear Colleague:

As you know, the recent rise in fuel prices has strained many public transit agencies' operating budgets and has made it difficult for agencies to sustain existing levels of service. I want to share with you information on funding resources and technical assistance programs that may help your agency mitigate the impacts of the rising price of gasoline and diesel.

Several of the Federal Transit Administration's (FTA's) formula grant programs allow recipients to fund operating expenses, including fuel costs, at a 50 percent Federal share. Recipients of funding under the Nonurbanized Formula Grant Program (Section 5311), Job Access and Reverse Commute Program (JARC, Section 5316), and New Freedom Program (Section 5317) can amend their project budgets to reprogram funds towards fuel expenses, provided that the services funded under these programs continue to meet the eligibility requirements under FTA's program circulars.

In addition, as of June 2008, the majority of JARC and New Freedom formula funds appropriated in Fiscal Year (FY) 2006 remain unobligated and these funds are scheduled to lapse after September 30, 2008. I encourage you to take advantage of these sources of funding this summer. (Lapsing JARC and New Freedom funds will return to their respective programs and be reapportioned among all states and large urbanized areas in FY 2009).

You also should know that on May 22, 2008, FTA published a Notice of Funding Availability for the FY 2008 Clean Fuels Grant Program. In FY 2008, \$28,753,000 in Clean Fuels Program funds are available to fund capital projects in areas that are in non-attainment for ozone or carbon monoxide. Eligible activities include projects related to clean fuel, biodiesel, hybrid electric, or zero emissions technology buses, which have the potential to reduce gasoline consumption as well as improve air quality. The deadline for responding to this Notice of Funding Availability is July 21, 2008. A copy of the Notice is available at http://www.fta.dot.gov/laws/leg_reg_federal_register.html.

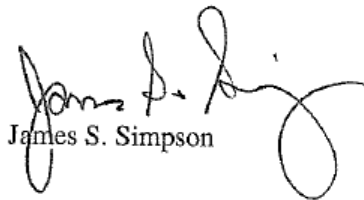
FTA also encourages transit agencies to seek training and technical assistance in implementing Environmental Management Systems (EMS). An EMS is a set of operational procedures that allows an organization to set specific environmental goals for its operations and measure its performance in achieving these goals. Agencies that have an EMS program in place have reported an increase in energy efficiency of their vehicles and facilities, as well as increased cost savings over time. More information about training and technical assistance in EMS can be obtained by contacting the FTA Office of Planning and Environment at (202) 366-1626.

Technical assistance is also available to respond to rising fuel prices. The Community Transportation Association of America (CTAA) has created a national purchase program with the private sector

designed to give rural transit providers the lowest possible costs for fuel as well as fuel rebates. More information on the Community Transit Energy Management Initiative can be found at <http://www.ctaa.org>. In addition, the American Public Transportation Association (APTA) has published recent survey information on how its members are coping with rising fuel prices, and this information is available at <http://www.apta.com>.

We recognize that the rising gas prices offer an opportunity to attract new riders to public transit but rising prices also have a notable impact on agency operating expenses. FTA seeks to provide funding flexibility, within the confines of our existing grant program requirements and technical assistance to help your agency manage rising energy costs. If you have any questions or would like additional information on this topic, please feel free to contact me directly at (202) 366-4040 or Ms. Susan E. Schruth, FTA Associate Administrator for Program Management at (202) 366-4020.

Sincerely,



James S. Simpson